

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of generating a reinforced polymer, the method comprising:
 - providing particles of ~~[[the]]~~ layered silicate and a supercritical fluid;
 - mixing the layered silicate particles with a polymer to form a treatable silicate-polymer mixture;
 - contacting the treatable mixture with the supercritical fluid to exfoliate the silicate so that the silicate particles disperse within the polymer; and
 - depressurizing the contacted mixture to exfoliate the silicate particles so that the layers are substantially dispersed within the polymer to define a reinforced polymer.
2. (Original) The method of claim 1 wherein the supercritical fluid is carbon dioxide.
3. (Original) The method of claim 1 wherein contacting the mixture includes pressurizing the mixture with the supercritical fluid to above the critical pressure of the supercritical fluid.
4. (Original) The method of claim 1 wherein contacting the mixture includes heating the mixture with the supercritical fluid to above the critical temperature of the supercritical fluid.
5. (Original) The method of claim 1 wherein contacting the mixture includes maintaining contact for between 0.5 minute and 10 hours.

6. (Original) The method of claim 1 wherein the silicate particles are substantially singly dispersed upon depressurization.

7. (Original) The method of claim 1 wherein the reinforced polymer includes between about 0.1 and 40 percent weight of the silicate particles.

8. (Original) The method of claim 1 wherein mixing includes shearing the silicate-polymer mixture.

9. (Original) A reinforced polymer comprising:
a polymer; and
a layered silicate having particle layers exfoliated by a supercritical fluid, the particle layers being substantially dispersed within the polymer to provide reinforcement to the polymer.

10. (Original) The reinforced polymer of claim 9 wherein the supercritical fluid is carbon dioxide.

11. (Original) The reinforced polymer of claim 10 wherein the supercritical fluid is pressurized above about 1100 pounds per square inch gauge and at a temperature above about 30 degrees Celsius.

12. (Original) The reinforced polymer of claim 9 wherein the layered silicate comprises between about 0.1 and 40 percent weight of the reinforced polymer.